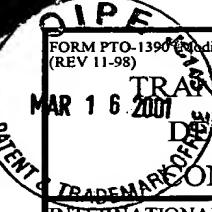


3-19-01 JC03 Rec'd PCT/PTO 16 MAR 2001 PCT

FORM PTO-1390 (2d ed. modified)
(REV 11-98)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

6300.96.1

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

INTERNATIONAL APPLICATION NO.
PCT/US99/21509INTERNATIONAL FILING DATE
September 17, 1999U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR
09/787498PRIORITY DATE CLAIMED
September 18, 1998**TITLE OF INVENTION****SURFACE MICROMACHINED MICRONEEDLES****APPLICANT(S) FOR DO/EO/US****A. BRUNO FRAZIER**
JOHN D. BRAZZLE

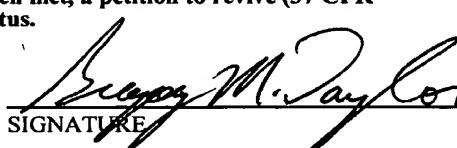
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. has been transmitted by the International Bureau.
 - c. is not required, as the application was filed in the United States Receiving Office (RO/US).
- A translation of the International Application into English (35 U.S.C. 371(c)(2)).
- A copy of the International Search Report (PCT/ISA/210).
- Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. have been transmitted by the International Bureau.
 - c. have not been made; however, the time limit for making such amendments has NOT expired.
 - d. have not been made and will not be made.
- A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
- An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
- A copy of the International Preliminary Examination Report (PCT/IPEA/409).
- A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 13 to 20 below concern document(s) or information included:

13. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. A **FIRST** preliminary amendment.
16. A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. A substitute specification.
18. A change of power of attorney and/or address letter.
19. Certificate of Mailing by Express Mail
20. Other items or information:

**Two Assignments with Form PTO-1595 Cover Sheet
Credit Card Payment Form authorizing the amount of \$934.00
Postcard**

| U.S. APPLICATION NO. (IF KNOWN) 37 CFR 097787498 | INTERNATIONAL APPLICATION NO. PCT/US99/21509 | ATTORNEY'S DOCKET NUMBER 6300.96.1 | | | | | | | | | | | | | | | | | | | |
|--|--|--|---------------------------|--------------|------|--------------|-----------|----|---------------------------|--------------------|---------|---|---------------------------|---|--|--------------------------|---------------|--------------------------------------|--|-----------------|--|
| 21. The following fees are submitted.: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) : | | CALCULATIONS PTO USE ONLY | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1,000.00 <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$860.00 <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$710.00 <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00 <input checked="" type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00 | | | | | | | | | | | | | | | | | | | | | |
| ENTER APPROPRIATE BASIC FEE AMOUNT = | | \$100.00 | | | | | | | | | | | | | | | | | | | |
| Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492 (e)). | | <input type="checkbox"/> 20 <input type="checkbox"/> 30 \$0.00 | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">CLAIMS</th> <th style="width: 25%;">NUMBER FILED</th> <th style="width: 25%;">NUMBER EXTRA</th> <th style="width: 25%;">RATE</th> </tr> </thead> <tbody> <tr> <td>Total claims</td> <td>53 - 20 =</td> <td>33</td> <td>x \$18.00 \$594.00</td> </tr> <tr> <td>Independent claims</td> <td>5 - 3 =</td> <td>2</td> <td>x \$80.00 \$160.00</td> </tr> <tr> <td colspan="2">Multiple Dependent Claims (check if applicable).</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">\$0.00</td> </tr> <tr> <td colspan="2" style="text-align: right;">TOTAL OF ABOVE CALCULATIONS =</td> <td style="text-align: center;">\$854.00</td> </tr> </tbody> </table> | | CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | Total claims | 53 - 20 = | 33 | x \$18.00 \$594.00 | Independent claims | 5 - 3 = | 2 | x \$80.00 \$160.00 | Multiple Dependent Claims (check if applicable). | | <input type="checkbox"/> | \$0.00 | TOTAL OF ABOVE CALCULATIONS = | | \$854.00 | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | | | | | | | | | | | | | | | | | |
| Total claims | 53 - 20 = | 33 | x \$18.00 \$594.00 | | | | | | | | | | | | | | | | | | |
| Independent claims | 5 - 3 = | 2 | x \$80.00 \$160.00 | | | | | | | | | | | | | | | | | | |
| Multiple Dependent Claims (check if applicable). | | <input type="checkbox"/> | \$0.00 | | | | | | | | | | | | | | | | | | |
| TOTAL OF ABOVE CALCULATIONS = | | \$854.00 | | | | | | | | | | | | | | | | | | | |
| Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28) (check if applicable). | | <input type="checkbox"/> \$0.00 | | | | | | | | | | | | | | | | | | | |
| SUBTOTAL = | | \$854.00 | | | | | | | | | | | | | | | | | | | |
| Processing fee of \$130.00 for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492 (f)). | | <input type="checkbox"/> 20 <input type="checkbox"/> 30 + \$0.00 | | | | | | | | | | | | | | | | | | | |
| TOTAL NATIONAL FEE = | | \$854.00 | | | | | | | | | | | | | | | | | | | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable). | | <input checked="" type="checkbox"/> \$80.00 | | | | | | | | | | | | | | | | | | | |
| TOTAL FEES ENCLOSED = | | \$934.00 | | | | | | | | | | | | | | | | | | | |
| | | Amount to be: refunded \$ charged \$ <hr/> | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> A check in the amount of Please see attached Form PTO-2038 to cover the above fees is enclosed. <input type="checkbox"/> Please charge my Deposit Account No. 23-3178 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 23-3178 A duplicate copy of this sheet is enclosed. | | | | | | | | | | | | | | | | | | | | | |
| NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. | | | | | | | | | | | | | | | | | | | | | |
| SEND ALL CORRESPONDENCE TO: | | | | | | | | | | | | | | | | | | | | | |
| Gregory M. Taylor WORKMAN, NYDEGGER & SEELEY 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, Utah 84111 Telephone: (801) 533-9800 Faxsimile: (801) 328-1707 | | | | | | | | | | | | | | | | | | | | | |
|  SIGNATURE <hr/> Gregory M. Taylor NAME <hr/> 34,263 REGISTRATION NUMBER <hr/> March 16, 2001 DATE | | | | | | | | | | | | | | | | | | | | | |

09 / 787498

532 Rec'd PCT/TTO 16 MAR 2001

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

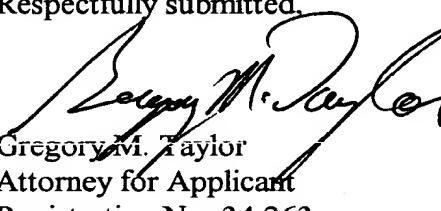
"Express Mail" Mailing Label No: EL 550340840 US

Date of Deposit: March 16, 2001

I hereby certify that this patent application in the name of A. Bruno Frazier and John D. Brazzle for "SURFACE MICROMACHINED MICRONEEDLES," together with the copy of Notification of Transmittal of the International Search Report or the Declaration; copy of Notification of International Preliminary Examination Report; Combined Declaration and Power of Attorney; Two (2) Assignment, together with Form PTO-1595 Cover Sheet; and, Credit Card Payment Form authorizing the amount of \$934, are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Dated this 16th day of March, 2001.

Respectfully submitted,


Gregory M. Taylor
Attorney for Applicant
Registration No. 34,263

WORKMAN, NYDEGGER & SEELEY
1000 Eagle Gate Tower
60 East South Temple
Salt Lake City, Utah 84111
Telephone: (801) 533-9800
Facsimile: (801) 328-1707